DOCUMENT RESUME

ED 026 143 PS 001 536

By-Ireland, Vera M.; Cox, Frances M.

Evaluation of the Preschool Program, 1966-67, Funded under ESEA Title I, P.L. 89-10.

Spons Agency-Office of Education (DHEW), Washington, D.C. Bureau of Elementary and Secondary Education.
Pub Date Feb 68
Note-28p.
Journal Cit-Research and Development Report (Atlanta Public Schools); v1 n1 Feb 1968
EDRS Price MF-$0.25 HC-$1.50
Descriptors-Achievement Gains, *Preschool Education, *Preschool Programs, *Program Evaluation, Team Teaching, Test Results
Identifiers-Auditory Vocal Association Inventory, Auditory Vocal Sequencing Inventory, Behavior Ranking Scale, Color Labeling Inventory, PPVT, Shape Labeling Inventory

This project was funded under Title I of the Elementary and Secondary Education Act. The project's objectives included (1) providing experiences for 4-year-old children from families in low socioeconomic areas that would prepare the children to cope adequately with the regular school program; (2) developing a "Framework and Curriculum Objectives Outline for Prekindergarten"; and (3) providing training and consultative assistance to preschool teachers. For the purposes of this project, the 4-year-olds were organized into units of 20, each unit having a lead teacher, a teacher assistant, and a teacher aid. Preschool specialists worked with these teachers. In order to measure the effectiveness of the preschool program, the performances of the prekindergarten children on various tests were compared to the performance of Title I and non-Title I kindergarten children. The results of the testing and comparison showed that the prekindergarten children improved significantly in cognitive areas and language performance, and even frequently they compared favorably in performance to the kindergarten children. (WD)

ED026143

U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

RESEARCH AND DEVELOPMENT REPORT

VOL. I, NO. 1 FEBRUARY, 1968

RECEIVED
JAN 1 7 1968

EVALUATION OF THE PRESCHOOL PROGRAM

1966-67

PS001536

Atlanta Public Schools

Atlanta, Georgia

RESEARCH AND DEVELOPMENT REPORT

Vol. I, No. 1 February, 1968

EVALUATION OF THE PRESCHOOL PROGRAM, 1966-67

Funded Under ESEA Title I, P. L. 89-10

Prepared by

Mrs. Vera M. Ireland
Research Assistant

Frances M. Cox
Coordinator of
Elementary Education

Dr. Jarvis Barnes
Assistant Superintendent
for Research and Development

Dr. John W. Letson
Superintendent

Atlanta Public Schools
224 Central Avenue, S. W.
Atlanta, Georgia 30303

PS 001536

TABLE OF CONTENTS

		Page
I.	ABSTRACT	1
II.	INTRODUCTION	3
III.	REVIEW OF RELATED LITERATURE	4
IV.	METHODS AND ANALYSIS OF DATA	
	Subjects	7
	Objectives	7
	Hypotheses	7
	Experiences of Preschool Children	9
	Framework and Curriculum Objectives Outline	17
	Training and Consultative Assistance to Preschool Teachers	17
V.	SUMMARY	22
VI.	IMPLICATIONS	23
	REFERENCES	24

I. ABSTRACT

The pilot prekindergarten curriculum development project was funded under Title I of ESEA, Public Law 89-10. The major objectives were (1) to provide compensatory experiences for the four-year-old children, (2) to develop further the *Framework and Curriculum Outline for Prekindergarten,* and (3) to provide training and consultative assistance to preschool teachers. This evaluation was based on these major objectives.

To test the effectiveness of the experiences provided for the children, comparisons were made between the performance of pupils in the prekindergarten program and in the kindergarten program. More specifically, the *Peabody Picture Vocabulary Test* (PPVT), a *Color Labeling Inventory* (CLI), and a *Shape Labeling Inventory* (SLI) were administered to the prekindergarten children and to samples of Title I and non-Title I kindergarten children. The Peabody I. Q. scores for each of the three groups of children were associated with the scores on the shape and color inventories by an analysis of covariance. It was expected that the group of children with the highest I. Q. scores would also make the highest scores on the inventories. However, the findings showed that in general the achievement of the prekindergarten pupils during the year in the areas of shape and color labeling was better than that of the Title I kindergarten pupils and was as good as that of the non-Title I kindergarten pupils. This achievement of the prekindergarten pupils is impressive when it is considered that they had significantly lower I. Q. scores than the non-Title I kindergarten pupils.

The *Auditory Vocal Sequencing Inventory* (AVSI) and the *Auditory Vocal Association Inventory* (AVAI) were given as pretest and posttest to the prekindergarten pupils in order to measure the gain in their language performance. The results indicated that the prekindergarten pupils improved significantly in their language performance as related to attention span and one type of reasoning.

Progress was made in developing a *Framework and Curriculum Objectives Outline for Prekindergarten* children. Prekindergarten and kindergarten teachers will use the initial draft during the 1967-68 school year and will then assist in making revisions.

In one method of making a descriptive appraisal of the assistance given the prekindergarten teachers, a *Behavior Ranking Scale* (BRS) was administered to the prekindergarten certified teachers and to samples of kindergarten Title I and non-Title I teachers. The results showed that the three groups had similar understandings of child behavior and placed about the same importance on behavior related to personality and behavior related to cognitive skills. However, the prekindergarten teachers placed significantly more importance on behavior related to social skills than did either the Title I or the non-Title I kindergarten teachers.

II. INTRODUCTION

There has been increasing emphasis on the importance of programs for the preschool aged child as educational services. The national enrollment in kindergartens has increased from 30 per cent of the five-year-olds in 1930 to 43.5 per cent in 1953 and to 64 per cent in 1959. On a regional basis in 1964 there were 30.7 per cent of the five-year-olds in preschool programs in the South and 75 per cent in the other three regions. Georgia is one of the 26 states which do not give state aid to kindergartens. However, the Atlanta Public School System has provided a kindergarten program for five-year-olds on a voluntary basis since 1923. In 1966-67 there were 8,443 kindergarten pupils enrolled, which was 73 per cent of the 11,575 first grade pupils enrolled.

A pilot prekindergarten curriculum development project is a part of the program funded under Title I of ESEA, Public Law 89-10, in the Atlanta Public Schools. Eight groups of 20 prekindergarten pupils per group from Title I schools participated in the program, three groups of which were in the Educational Improvement Program (EIP). The program focused on providing experiences for the children, developing a curriculum, and training the preschool teachers. The objectives of the program were based on the premise that early intervention in childhood development for disadvantaged children may provide the compensatory experiences which will prepare them to cope adequately with the regular school program. Support for this premise and for the objectives of this project is found in the historical, theoretical, and research evidence cited in this report.

III. REVIEW OF RELATED LITERATURE

The first kindergarten in the United States was established in 1856 by a pupil of Froebel at Watertown, Wisconsin -- twenty years after Froebel started the first preschool program in Germany. However, the first public school kindergarten, in St. Louis, was not established until 1873. The work of Marie Montessori, M. D., in Italy between 1910 and 1930 influenced the development of kindergarten education in this country. The White House Conferences of 1950 and 1960 recommended that kindergartens be included as a part of the public school program for all children.

Project Head Start, the federal preschool program for disadvantaged children, was initiated in the summer of 1965. Although acclaimed as highly successful, this program had little effect nationally on the size of nursery and kindergarten enrollments when the regular school year began in the fall.

In recent years a greater emphasis has been placed on how educational objectives of early childhood education can best be met. The current thrust in study and in research on methodology is based on the theories of earlier studies. Gesell (1) has contributed to the present knowledge about early childhood development and the importance of the behavior patterns developed during these years as a basis for further growth. Piaget (2) has through extensive study of intellectual development over the past several decades been influential. His theory is that the child progresses through a series of stages in intellectual development. He also has suggested that the rate at which the child moves through these stages can differ. Hunt (3) has synthesized the theories of Piaget with other studies in learning and intellectual development. He has suggested that the early years of development play a significant role in providing a generalized conceptual skill needed for later learning.

Bloom's (4) recent study of human development suggests that environmental manipulation ought to occur during the preschool years to achieve its

greatest impact in the area of intelligence. His study supports the relatively new concept that a person's intelligence will vary as a function of his environment and that early environmental enrichment programs can have an influence in accelerating intellectual development.

Deutsch (5), Bernstein (6), and Hess (7) studied ways in which the environment of disadvantaged children may be manipulated to the best advantage for the child's growth and development. Deutsch identified the nature of the deprivation of the urban child in disadvantaged areas and is developing a variety of special enrichment techniques to supplement the traditional curriculum for the preschool aged child. These techniques focus around the areas of cognitive functioning, memory training, language development, and motivation. Bernstein pointed out the differences in language systems between the lower and middle classes and suggested that these differences can cause a lack of understanding as individuals attempt to communicate between the two. The studies of Hess tended to place intellectual development within the context of human interaction and stressed the significance of human beings in a child's life. Hess and Shipman (8) reported findings from a study of mothers and their four-year-old children to support the arguments that patterns reflecting the social, economic, and educational behavior are developed in early childhood; that mothers communicate cognitive meanings to their children; and that growth of cognitive processes are restricted by family control systems. Olin, Hess, and Shipman (9) extended this study and reported that steps can be taken to change the mother's behavior and that successful intervention programs with the preschool children must involve social change.

Noel (10) found positive relationships between the quality of language used by the child and the frequency of the different types of oral expressions used by his parents.

Smith (11) pointed out that children, regardless of whether they are disadvantaged products of socio-economic isolation or unique associations, do exhibit the capacity of improving their language facility when

PS 001536

they are provided intelligent and carefully planned compensatory activities.

Gray and Klauss (12) in their experimental preschool program for culturally deprived children, by specially planned techniques, showed that progressive retardation in cognitive development and school achievement that characterizes these children can be offset to some degree by early intervention. They further pointed out that the development of speech is crucial to the development of verbal control in learning.

Riessman (13) claims that the new preschool program emphasis for disadvantaged children is a myth. He believes that it is based on a false radicalism which is a sharp contrast to sociological radicalism which presents institutional or structural changes as the fundamental approach to changing society and children. Also he emphasizes that it overlooks the fact that gains made in preschool programs decline quite rapidly when the children return to traditional school programs.

There are indications of a continuing need to focus on problems related to the various aspects of early childhood education and the methodology required to meet best the needs of children with differences in their environmental experiences. Currently, seven colleges and universities are cooperating in the first National Laboratory of Early Childhood Education with the guiding purpose to improve educational services for children in pre-primary and primary programs. These include New York University, Peabody College, Syracuse University, University of Arizona, University of Chicago, Cornell University, and University of Illinois, where the coordinating center for the National Program in Early Childhood education is located.

Local observations have revealed that socio-economic deprivation is accompanied by educational deprivation of children enrolling in kindergarten and first grade without experiences necessary to insure performance on a cognitive or social level commensurate with that of children from more advantaged homes.

IV. METHODS AND ANALYSIS OF DATA

The prekindergarten project in the Atlanta School System was begun in the spring of 1966. However, this report deals with the evaluation of the continuation of the program during the school year 1966-67.

Subjects

The project provided compensatory experiences for units of approximately 20 four-year-olds each. A team of three adults worked with each unit. Each team included a lead teacher, a teacher assistant, and a teacher aide. Preschool specialists provided consultation and inservice training for the prekindergarten teaching teams and kindergarten teachers. The specialists also assisted the teachers by developing a guide for achieving the prekindergarten curriculum objectives and by helping the teachers with daily class plans.

Objectives

The evaluation of the prekindergarten program was based on the major objectives of the project. These objectives were (1) to provide experiences for four-year-old children from families in low socioeconomic school communities (Title I) which would prepare the children to cope adequately with the regular school program, (2) to develop a *Framework and Curriculum Objectives Outline for Prekindergarten,* and (3) to provide training and consultative assistance to preschool teachers.

Hypotheses

The plan for evaluating the project was based on the major objectives of the project and included a series of null hypotheses to be tested.

The hypotheses concerning the performance of pupils included:

H_1 There is no statistical difference in the environmental information and language performance levels of the prekindergarten children, kindergarten children in families

from lower socioeconomic communities (Title I schools), and kindergarten children in families from upper socioeconomic communities (non-Title I schools).

H_2 There is no significant gain in auditory attention span and one type of verbal reasoning of the prekindergarten children resulting from their prekindergarten experience.

The hypotheses concerning teacher understanding of child behavior and the importance they placed on child behavior were:

H_3 There is no statistical difference in the understanding of child behavior of the prekindergarten teachers, kindergarten teachers in Title I schools, and kindergarten teachers in non-Title I schools.

H_4 There is no statistical difference among the prekindergarten teachers, kindergarten teachers in Title I schools, and kindergarten teachers in non-Title I schools in the importance placed upon behavior related to the personality of the child.

H_5 There is no statistical difference among the prekindergarten teachers, kindergarten teachers in Title I schools, and kindergarten teachers in non-Title I schools in the importance placed upon behavior related to the cognitive skills of the child.

H_6 There is no statistical difference among the prekindergarten teachers, kindergarten teachers in Title I schools, and kindergarten teachers in non-Title I schools in the importance placed upon behavior related to the social skills of the child.

Experiences of Preschool Children

To measure the effectiveness of the experiences provided for the four-year-old children, comparisons were made between the performance of pupils in the prekindergarten program and in kindergarten groups. More specifically, the evaluation involved eight groups of Title I prekindergarten children, three of which were in the Educational Improvement Program (EIP), a sample of Title I kindergarten pupils, and a sample of non-Title I kindergarten pupils.

The *Peabody Picture Vocabulary Test* (PPVT), a *Color Labeling Inventory* (CLI), and a *Shape Labeling Inventory* (SLI), and two subtests of the *Illinois Test of Psycholinguistics Abilities* (ITPA) were administered to the prekindergarten children, a sample of kindergarten children in Title I schools, and a sample of kindergarten children in non-Title I schools. The CLI and SLI were developed at Deutsch's Institute for Developmental Studies in New York.

The PPVT I. Q. scores for each of the three groups of children were associated with their scores on the shape and color labeling inventories for each group. It was expected that the non-Title I kindergarten group of children which had the highest mean I. Q. score would make the highest score on the cognitive measures. The PPVT revealed that the non-Title I kindergarten group ranked highest in the I. Q. scores, the prekindergarten group next, and the Title I kindergarten group lowest.

In order to test the first hypothesis (H_1) a *Shape Labeling Inventory* and a *Color Labeling Inventory* were administered to the three groups of children, thus obtaining information on their environmental and language performance levels. Analysis of covariance was computed with the subscores of the CLI and SLI. Table 1 shows data related to the analysis of covariance on the SLI nonverbal subscores. A significant difference between at least two groups is indicated by the F ratio. Duncan's Multiple Range Test indicates that at the .05 level of significance the prekindergarten group scored higher on the inventory than did either of the other two groups and that the non-Title I kindergarten pupils scored higher than did those in Title I.

TABLE 1

Analysis of Covariance With Shape Labeling Inventory-Nonverbal as the Dependent Variable and I. Q. as a Covariate

Source of Variation	Degrees of Freedom	Sums of Squares	Mean Square	F Ratio	Group Means PK N=36	K,T-1 N=34	K,Non-T-1 N=36
Between Groups	2	92.97	46.48	14.90**	7.50	5.14	6.51
Error	102	318.12	3.12				
Total	105	415.56					

** Significant at .01 level

An analysis of covariance was calculated using the shape labeling verbal scores as the dependent variable with I. Q. as a covariate (Table 2). According to Duncan's Multiple Range Test the prekindergarten Title I and kindergarten non-Title I groups scored significantly higher than the kindergarten Title I group. There was no significant difference between prekindergarten and kindergarten non-Title I groups.

A *Color Labeling Inventory* with two subtests was also administered to the three groups of preschool children. Analysis of covariance was used to determine whether any differences existed among the three groups using color labeling nonverbal subscores as the dependent variable and I. Q. as the covariate. The results are reported in Table 3. Duncan's Multiple Range Test indicates that the prekindergarten and non-Title I kindergarten pupils scored significantly better than the Title I kindergarten pupils on this inventory. There was no difference between the Title I prekindergarten and kindergarten non-Title I groups.

The results of an analysis of covariance using color labeling verbal scores as the dependent variable and I. Q. as the covariate are given in Table 4. The F ratio indicated that the scores of the three groups were not significantly different at the .05 level.

These data in Tables 1, 2, 3, and 4 indicate that in general the achievement of the prekindergarten pupils during the year in the areas of shape and color labeling was better than that of the Title I kindergarten pupils and was as good as that of the non-Title I kindergarten pupils. This achievement of the prekindergarten pupils is impressive when it is considered that they ranked second to the non-Title I kindergarten pupils in mean I. Q. scores.

TABLE 2

Analysis of Covariance With Shape Labeling Inventory-Verbal
as the Dependent Variable and I. Q. as a Covariate

Source of Variation	Degrees of Freedom	Sums of Squares	Mean Square	F Ratio	Group Means PK N=36	K,T-1 N=34	K,Non-T-1 N=36
Between Groups	2	97.29	4.86	9.55**	7.04	4.63	6.06
Error	102	518.75	5.10				
Total	105	650.54					

** Significant at .01 level

TABLE 3

Analysis of Covariance With Color Labeling Inventory-Nonverbal as the Dependent Variable and I. Q. as a Covariate

Source of Variation	Degrees of Freedom	Sums of Squares	Mean Square	F Ratio	Group Means PK N=36	K,T-1 N=34	K,Non-T-1 N=36
Between Groups	2	13.39	6.70	9.27**	5.82	5.00	5.68
Error	102	73.68	72.24				
Total	105	88.49					

** Significant at .01 level

TABLE 4

Analysis of Covariance With Color Labeling Inventory-Verbal
as the Dependent Variable and I. Q. as a Covariate

Source of Variation	Degrees of Freedom	Sums of Squares	Mean Square	F Ratio	Group Means PK N=36	K,T-1 N=34	K,Non-T-1 N=36
Between Groups	2	48.59	24.30	2.48	10.27	8.72	10.00
Error	102	996.07					
Total	105	1,080.34					

In order to test the second hypothesis (H_2), two subtests of the ITPA were given as a pretest and a posttest to the prekindergarten pupils to determine if there was a significant gain in their language performance as related to attention span and one type of reasoning. The inventories given were the *Auditory Vocal Sequencing Inventory* (AVSI) and the *Auditory Vocal Association Inventory* (AVAI). Language age scores for pretests and posttests were calculated and compared for significant differences using a *t* test for dependent measures. The pretests and posttests were administered approximately six months apart. Table 5 gives the pretest and posttest mean language age in months and the computed *t* values for the AVAI and AVSI. The significant *t* values indicate that the pupils made a significant gain in language age on the AVAI and the AVSI during their prekindergarten experiences. These results indicate that the prekindergarten pupils improved significantly in their language performance as related to attention span and one type of reasoning. Moreover, the mean language gain in months was greater than the expected gain of six months for each of the areas tested. Hence, the null hypothesis that there would be no significant gain was rejected.

The significant gains in language ages as reported in the above data support the observations made by the prekindergarten teachers. They had noted that the four-year-old children from the Title I school communities talked little at the beginning of the school year but that most all of them became increasingly more verbal later in the school year.

TABLE 5

Pretest and Posttest Means for Prekindergarten Group on ITPA Auditory Vocal Association and Auditory Vocal Sequencing Subtests with Calculated *t* Values

	N	Pretest Mean	Posttest Mean	*t* Value
Language Age - AVAI	113	35.75	52.35	7.209**
Language Age - AVSI	106	54.92	63.78	4.717**

** Significant at .01 level

Framework and Curriculum Objectives Outline

A composite curriculum report was made which was based on the curriculum guides of the preschool specialists and experiences of the teaching teams. The procedure for developing the *Framework and Curriculum Objectives Outline for Prekindergarten* is discussed below.

1. The content of daily lesson plans of the prekindergarten teachers was organized into general and specific objectives related to sensory perception, motor skills, social behavior, and aesthetic values.

2. Research assistants discussed in detail the content of the lesson plans for each of the four general areas with representatives of the prekindergarten teachers.

3. The research assistants then categorized the curriculum content data. The tasks to be accomplished in relation to each of the specific objectives were subdivided as to content variables. For each of the content variables, process variables were listed when indicated. The process variables included learning activities, media, grouping patterns, and teaching strategies.

The *Framework and Curriculum Objectives Outline for Prekindergarten* is not yet ready for general dissemination. Prekindergarten and kindergarten teachers will use the initial draft during 1967-68 school year and will assist in making revisions.

Training and Consultative Assistance to Preschool Teachers

Experience with the prekindergarten program during the school year of 1965-66 helped the Atlanta School System focus attention on the importance of providing a continuing compensatory program for the

children involved. It was recognized that the kindergarten teachers needed assistance.

A major problem was that generally the teachers were not prepared to cope with the large groups of pupils with varying levels of achievement. This was particularly true with those pupils who participated in the prekindergarten program last year. As a part of the plan to help remedy this situation, ninety of the kindergarten teachers in the Atlanta Public Schools voluntarily participated in an inservice Early Childhood Education course during the year. This was made possible through the use of staff teachers who released the kindergarten teachers when necessary. Preschool specialists, the coordinator of elementary education, and the director of inservice education conducted the training.

Two methods were used to make a descriptive appraisal of the assistance given the prekindergarten and kindergarten teachers. First, a *Behavior Ranking Scale* (BRS) was administered to the prekindergarten certified teachers, a sample of kindergarten teachers in Title I schools, and a sample of kindergarten teachers in non-Title I schools in order to test the hypotheses concerning the teachers' understanding of child behavior and the importance they placed on child behavior as related to personality, cognitive skills, and social skills (H_3, H_4, and H_5). The responses made by the different groups of teachers involved were compared. Second, a critical incident form requested the kindergarten teachers to relate their most successful and least satisfactory experiences to the training which they had received or thought they needed.

The BRS measures the importance which teachers place on pupil behavior related to personality, cognitive skills, and social skills. Table 6 gives data concerning the scores of the three groups of teachers on each of the scales by means, standard deviations, the number of teachers in each group; and the F ratio among the three groups compares separately on each scale. These data show that the prekindergarten teachers, kindergarten teachers in Title I schools, and kindergarten teachers in

TABLE 6

Scores of the Prekindergarten and Kindergarten Teachers on the Behavior Ranking Scale (BRS)

Variable	Prekindergarten N = 8		Title I Kindergarten N = 25		Non-Title I Kindergarten N = 25		F Ratio
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	
Total BRS	546.0	43.5	527.1	55.4	531.8	68.1	0.31
Personality	19.5	4.6	15.5	4.7	16.7	4.1	2.40
Cognitive	10.0	5.6	12.8	5.7	11.9	6.1	0.68
Social	20.6	13.6	13.7	3.6	12.8	3.9	4.85*

* Significant at .05 level

non-Title I schools had similar understandings of child behavior and placed the same importance on behavior related to personality and behavior related to cognitive skills. Hence, the null hypotheses (H_3, H_4, and H_5) were accepted. The prekindergarten teachers significantly placed more importance on behavior related to social skills than did the Title I or non-Title I kindergarten teachers. Null hypothesis number six (H_6) was, therefore, rejected.

The critical incident form requested the teachers to give a brief narrative description of their most successful incident and report on the training and/or experiences which had helped them handle the situation successfully. They were also requested to describe their least satisfactory incident and to list the training and/or experiences which they thought would be helpful to them in handling similar situations in the future. Their responses (related to the critical incidents concerning the training and/or experiences which were helpful or were needed) indicated that Title I and non-Title I kindergarten teachers agreed that the experiences which were most helpful to them were (1) previous experiences with children, (2) assistance from colleagues, (3) various kinds of formal training, and (4) assistance from supervisory personnel, and (5) self-help (observation and reading).

The responses of both groups of teachers also indicated the need for similar kinds of assistance to help them handle problem situations in the future. On the whole, more teachers identified a successful incident than an unsatisfactory one. This was true for the teachers of both groups. The Title I and non-Title I kindergarten teachers agreed that experiences which they most needed included access to services of supportive personnel (psychologists, social workers, and preschool specialists) and development of relationships between home and school. Both groups of teachers showed that they were parent oriented and familiar with teacher aides and other kinds of supportive services offered by Title I.

The kinds of problems described in the teacher responses to the critical incidents form sent to Title I and non-Title I kindergarten teachers indicate

similarities and differences in the behavioral characteristics of the children. The similarities include the fact that the pupils in Title I schools have a short interest span, are hostile to other children, and are prone to use foul language. The different behavioral characteristics of the Title I children which were listed include taking things that do not belong to them, hitting others, lacking self confidence, and refusing to eat all kinds of foods. There were some indications that over a period of time the negative behavioral characteristics were changed in a positive direction.

V. SUMMARY

The project was generally effective in accomplishing each of the major objectives as implied by the findings of the study. The prekindergarten pupils improved in their performance in cognitive areas. At the end of the year the prekindergarten children compared favorably with kindergarten children in environmental information and language performance.

The prekindergarten pupils improved significantly in their language performance as related to attention span and one type of reasoning during their prekindergarten experiences. These results confirmed the informal observations made by the prekindergarten teachers. They had noted that their pupils talked very little at the beginning of the school year but that almost all of them became more verbal during the year.

The *Framework and Curriculum Objectives Outline for Prekindergarten* provides a basis for further focus on local educational programs for the preschool aged children.

It was identified that the prekindergarten teachers significantly placed more importance on pupil behavior related to social skills than did either group of kindergarten teachers. The kindergarten teachers indicated a recognition of the importance of providing compensatory experiences for four-year-old disadvantaged children on a continuing basis.

VI. IMPLICATIONS

This evaluation implies a need for further development of instruments and procedures for testing in order to assess more adequately the abilities and changes in the total development of the preschool aged child. The *Framework and Curriculum Objectives Outline for Prekindergarten* should be revised and refined. For instance, the specific objectives in each teaching content area should be stated as performance objectives in sequential order with time schedules for various pupil ability levels. Moreover, the evaluation plan should be individualized, so that the teachers will be able to obtain periodically a profile of each child, concerning his accomplishments in the content variables and the process variables to which he responds most satisfactorily. The need for further teacher training is evident, especially for the kindergarten teachers, so that a progression of experiences for the child who participates in the prekindergarten program might be insured.

REFERENCES

1. Gesell et al. "The First Five Years of Life -- Guide to the Study of the Preschool Child." Yale University Clinic of Child Development. New York: Harper and Brothers. 1950.

2. Piaget, Jean. "Development and Learning." In R. E. Ripple and V. A. Rockcastle, Editors. *Piaget Rediscovered.* Ithica, New York: Cornell University. 1964.

3. Hunt, John McVicker. "The Psychological Basis for using Preschool Enrichment as an Antidote for Cultural Deprivation." *Merrill Palmer Quarterly.* July, 1964. 10.

4. Bloom, Benjamin S. *Stability and Change in Human Characteristics.* New York: John Wiley & Sons. 1964.

5. Deutsch, Martin. "Nursery Education: The Influence of Social Programming on Early Development." *Journal of Nursery Education.* April, 1963.

6. Bernstein, Basil. "A Public Language: Some Sociological Implications of a Linguistic Form." *British Journal of Sociology.* December, 1959.

7. Hess, Robert. "Material Teaching Style, Social Class, and Educability." Paper read at the Midwestern Association for Nursery Education Conference. May 2, 1965. Mimeographed.

8. Hess, R. D. and Shipman, Virginia C. "Early Experiences and the Socialization of Cognitive Modes in Children." *Child Development.* 36 (4), 869-886. n.d.

9. Olin, E. G., Hess, R. D. and Shipman, Virginia. "Role of Mother's Language Styles in Mediating Their Preschool Childrens' Cognitive Development." Unpublished paper read at the American Educational Research Association, Chicago. 1966.

10. Noel, Doris J. "A Comparative Study of the Relationship Between the Quality and Types of Language Used in the Home." *Journal of Educational Research.* 47:161-167.

11. Smith, J. M., Jr. *Language Development in Negro and White Children: A Survey of Comparative Data and of Background Factors.* English Curriculum Study Center. The University of Georgia. 1964.

12. Gray, Susan W. and Klaus, R. A. "An Experimental Preschool Program for Culturally Deprived Children." *Child Development.* 36:887-898.

13. Riessman, Frank. "Education for the Culturally Deprived Child." *The Science Teacher.* November, 1965. 14-16.